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911	Title 2005 Fall Wild Turkey Harvest Results	2/21/2006

Abstract: *Hunters harvested 716 wild turkeys in 53 of the 60 counties open hunting during the first modern day fall wild turkey hunting season. The 18 day archery-only season accounted for 18.9% of the harvest with 81.1% of the harvest occurring the last 5 days of the combined firearms and archery season. Weekends accounted for almost 50% of the total harvest with nearly 40% during one weekend of firearms season. Juvenile birds made up 27% of the harvest while adults composed 73% for a juvenile to adult ration of 1:3. The high adult proportion was probably related to the low brood production in 2005 and the high production in 2004. Counties harvesting at least 30 birds were Switzerland, Harrison, Warrick, Pike, Orange, Jefferson, Crawford, and Perry. The differences in summer brood production, record warm temperatures, an abundant mast crop, and the novelty of fall wild turkey hunting in Indiana influenced the harvest results.*

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The first modern day fall wild turkey hunting season in Indiana was held from October 1-23, 2005. The archery-only portion of the season occurred from October 1-18 in 60 counties. The combined firearms and archery season occurred from October 19-23. Firearm hunting was limited to 26 counties in the south-central and southeast regions of the state. Hunters harvested a total of 716 birds during the entire season with 135 (18.9%) taken during the archery-only portion of the season and 581 (81.1%) taken during the combined firearms and archery portion (Table 1). Across both portions of the season, archers harvested 181 birds (25%) while firearm's hunters took 525 birds (75%). Weekends (3 during archery only portion, 1 combined firearms & archery) accounted for the almost half of the harvest (49.7%) with 9.9% during weekends of the archery-only season and 39.8% on the one weekend of the combined firearms and archery portion (Table 2). Comprehensive lifetime license holders harvested 62% of the birds followed by resident fall turkey license holders (22%) (Table 3).

The determination of the sex and age of harvested wild turkeys was done by hunters and check station operators using a combination of spur and fall plumage characteristics (wing and breast feathers) as depicted in illustrations provided in the "2005-2006 Indiana Hunting and Trapping Guide". Juvenile birds made up 27% of the harvest while adults composed 73% for a juvenile to adult ration of 1:3 (Table 4). Based on observations in other states, a high proportion of adults in the fall harvest generally occurs following poor summer brood production. Brood production in Indiana during the summer of 2005 was below average (lowest recorded in 13 years) and was in notable contrast to the above average brood production during the summer of 2004 (highest recorded in 13 years). The wide extremes in brood production during the 2004 and 2005 summers probably resulted in much higher proportion of adults available for harvest. Based on the fall harvest experience and research in other states, adult gobblers are generally the least vulnerable to fall harvest than the other 3 sex and age groups. Hunter selection for larger birds, when given the opportunity, may help explain the high proportion of adult males in the harvest. Finally, the interpretation of the fall sex and age criteria by hunters and check station operators was undetermined factor related to errors in sex and age determination. Accurate sex and age determinations of fall turkeys is a common problem, even in states with more fall turkey hunting experience.

Counties harvesting at least 30 birds (> 4% of the total harvest) were Switzerland (57; 8.0%), Harrison (42; 5.9%), Warrick (40; 5.6%), Pike (39; 5.4%), Orange (37; 5.2%), Jefferson (32; 4.5%), Crawford (31; 4.3%), and Perry (30; 4.2%) (Table 5). All of the counties harvesting at least 30 birds were open to both archery and firearms hunting. The proportion of the fall to the spring harvest did not exceed 15% for any county open to fall hunting and the overall fall to spring harvest proportion was 6.4%.

The first fall season is probably not indicative of what is to be expected over time. Besides the novelty of this first season and the general inexperience of Indiana hunters with fall turkey hunting, there were several environmental events that influenced the harvest. Record warm temperatures influenced bird activity and reduced their normal food demands. The first killing frost in southern Indiana was at least 3 weeks later than normal and several hunters complained about the nuisance of mosquitoes during the firearms portion of the season. Wild turkey movements were also influenced by one of the heaviest mast crops (hard and soft) witnessed in recent years. Besides the abundant mast foods, there were still many unharvested agricultural crop fields. The wide variation of summer brood production during 2004 and 2005 influenced the age structure of the harvest as previously discussed. Fall turkey hunting experience and errors in sex and age determinations should both improve over time.

Table 1. Fall wild turkey harvest by season and weapon used - Indiana, 2005.

Season	Archery Only		Both Firearm & Archery		Weapon Totals	
Dates	1-18 October 2005		19-23 October 2005			
	No.	%	No.	%	No.	%
Bow	124	92%	50	9%	174	24%
X-Bow	11	8%	6	1%	17	2%
Shotgun	---	---	524	90%	524	73%
Muzzleloader SG	---	---	1	0%	1	0%
<i>Season Totals</i>	135	18.9% ^a	581	81.1% ^a	716	100%

^a Represents proportion of total harvest (716) taken during the archery-only or the combined firearms and archery portions of the fall season.

Table 2. Fall wild turkey harvest by day of the 2005 season, Indiana.

Date	Day	No. Harvested	Percent of Total	Cummulative Total	Cummulative Percent
<i>Archery Only</i>					
10/1/2005	Sat	11	1.5%	11	1.5%
10/2/2005	Sun	8	1.1%	19	2.7%
10/3/2005	Mon	9	1.3%	28	3.9%
10/4/2005	Tue	1	0.1%	29	4.1%
10/5/2005	Wed	6	0.8%	35	4.9%
10/6/2005	Thur	1	0.1%	36	5.0%
10/7/2005	Fri	14	2.0%	50	7.0%
10/8/2005	Sat	12	1.7%	62	8.7%
10/9/2005	Sun	10	1.4%	72	10.1%
10/10/2005	Mon	2	0.3%	74	10.3%
10/11/2005	Tue	2	0.3%	76	10.6%
10/12/2005	Wed	6	0.8%	82	11.5%
10/13/2005	Thur	3	0.4%	85	11.9%
10/14/2005	Fri	6	0.8%	91	12.7%
10/15/2005	Sat	17	2.4%	108	15.1%
10/16/2005	Sun	13	1.8%	121	16.9%
10/17/2005	Mon	7	1.0%	128	17.9%
10/18/2005	Tue	6	0.8%	134	18.7%
Unknown		1	0.1%	135	18.9%
<i>Both Archery and Firearms</i>					
10/19/2005	Wed	111	15.5%	111	15.5%
10/20/2005	Thur	97	13.5%	208	29.1%
10/21/2005	Fri	88	12.3%	296	41.3%
10/22/2005	Sat	154	21.5%	450	62.8%
10/23/2005	Sun	131	18.3%	581	81.1%
Total		716			100%

Table 3. Fall wild turkey harvest by permit type - Indiana, 2005.

Type of Permit	No.	%	No. Sold by Season End Date
Resident Fall Turkey	156	22%	2,225
Non-Resident Fall Turkey	2	0%	20
Comprehensive Lifetime	446	62%	43,028 ^a
Comprehensive Youth	35	5%	19,195
Landowner/active military	77	11%	Unknown & Exempt
Total Harvest	716		

^a Comprehensive lifetime hunt and comprehensive hunt & fish as of July 2005. Value represents the number of lifetime license holders who could potentially hunt.

Table 4. Age and sex structure of the fall wild turkey harvest - Indiana, 2005.

	Juvenile ^a		Adult ^b		Total	
	No.	% ^c	No.	% ^c	No.	% ^c
Male	82	11.5%	285	39.8%	367	51.3%
Female	108	15.1%	241	33.7%	349	48.7%
Total	190	26.5%	526	73.5%	716	
						Juvenile : Adult 1 : 3

^a Juvenile were birds estimated to be < 6 months old.

^b Adults were birds estimated to be >= 14 months old.

^c Percents are of the total harvest of 716 birds.

Table 5. Fall and spring wild turkey harvests in Indiana, 2005. ^a

County	Type of Fall Season ^b	2005 Fall Harvest	Percent of Fall Harvest	2005 Spring Harvest	Percent of Fall / Spring
Adams	Not Open	---	---	0	---
Allen	Not Open	---	---	6	---
Bartholomew	Archery	0	0.0%	119	0.0%
Benton	Not Open	---	---	6	---
Blackford	Not Open	---	---	Not Open	---
Boone	Not Open	---	---	0	---
Brown	Both	16	2.2%	227	7.0%
Carroll	Not Open	---	---	7	---
Cass	Archery	1	0.1%	33	3.0%
Clark	Both	25	3.5%	298	8.4%
Clay	Archery	2	0.3%	107	1.9%
Clinton	Not Open	---	---	0	---
Crawford	Both	31	4.3%	329	9.4%
Daviess	Archery	2	0.3%	86	2.3%
Dearborn	Both	21	2.9%	368	5.7%
Decatur	Archery	0	0.0%	46	0.0%
DeKalb	Archery	2	0.3%	44	4.5%
Delaware	Not Open	---	---	Not Open	---
Dubois	Both	15	2.1%	230	6.5%
Elkhart	Not Open	---	---	24	---
Fayette	Archery	1	0.1%	40	2.5%
Floyd	Both	9	1.3%	63	14.3%
Fountain	Archery	3	0.4%	153	2.0%
Franklin	Both	21	2.9%	347	6.1%
Fulton	Archery	3	0.4%	51	5.9%
Gibson	Archery	3	0.4%	113	2.7%
Grant	Not Open	---	---	2	---
Greene	Both ^c	27	3.8%	352	7.7%
Hamilton	Not Open	---	---	1	---
Hancock	Not Open	---	---	0	---
Harrison	Both	42	5.9%	406	10.3%
Hendricks	Not Open	---	---	4	---
Henry	Not Open	---	---	Not Open	---
Howard	Not Open	---	---	4	---
Huntington	Not Open	---	---	9	---
Jackson	Both	20	2.8%	221	9.0%
Jasper	Archery ^c	1	0.1%	50	2.0%
Jay	Not Open	---	---	Not Open	---
Jefferson	Both	32	4.5%	415	7.7%
Jennings	Both	17	2.4%	277	6.1%
Johnson	Archery	5	0.7%	35	14.3%
Knox	Archery	3	0.4%	61	4.9%
Kosciusko	Not Open	---	---	26	---
Lagrange	Archery	4	0.6%	72	5.6%
Lake	Not Open	---	---	4	---
LaPorte	Archery	2	0.3%	132	1.5%
Lawrence	Both	25	3.5%	273	9.2%

Table 5. Fall and spring wild turkey harvests in Indiana, 2005. ^a con't

County	Type of Fall Season ^b	2005 Fall Harvest	Percent of Fall Harvest	2005 Spring Harvest	Percent of Fall / Spring
Madison	Not Open	---	---	1	---
Marion	Not Open	---	---	0	---
Marshall	Archery	8	1.1%	167	4.8%
Martin	Both	14	2.0%	228	6.1%
Miami	Not Open	---	---	21	---
Monroe	Both	18	2.5%	208	8.7%
Montgomery	Archery	0	0.0%	49	0.0%
Morgan	Archery	0	0.0%	64	0.0%
Newton	Archery ^c	2	0.3%	56	3.6%
Noble	Not Open	---	---	15	---
Ohio	Both	14	2.0%	161	8.7%
Orange	Both	37	5.2%	373	9.9%
Owen	Both	19	2.7%	232	8.2%
Parke	Archery	7	1.0%	376	1.9%
Perry	Both	30	4.2%	445	6.7%
Pike	Both	39	5.4%	261	14.9%
Porter	Not Open	---	---	13	---
Posey	Archery	1	0.1%	86	1.2%
Pulaski	Archery	1	0.1%	61	1.6%
Putnam	Archery	5	0.7%	151	3.3%
Randolph	Not Open	---	---	0	---
Ripley	Both	9	1.3%	223	4.0%
Rush	Not Open	---	---	1	---
St. Joseph	Archery	3	0.4%	99	3.0%
Scott	Both	18	2.5%	181	9.9%
Shelby	Not Open	---	---	2	---
Spencer	Both	14	2.0%	278	5.0%
Starke	Archery	4	0.6%	163	2.5%
Steuben	Archery	9	1.3%	216	4.2%
Sullivan	Archery	5	0.7%	232	2.2%
Switzerland	Both	57	8.0%	478	11.9%
Tippecanoe	Archery	0	0.0%	30	0.0%
Tipton	Not Open	---	---	1	---
Union	Archery	2	0.3%	67	3.0%
Vanderburg	Archery	0	0.0%	9	0.0%
Vermillion	Archery	3	0.4%	135	2.2%
Vigo	Archery	3	0.4%	151	2.0%
Wabash	Not Open	---	---	38	---
Warren	Archery	3	0.4%	108	2.8%
Warrick	Both	40	5.6%	356	11.2%
Washington	Both	17	2.4%	286	5.9%
Wayne	Archery	0	0.0%	44	0.0%
Wells	Not Open	---	---	5	---
White	Not Open	---	0.0%	23	---
Whitley	Not Open	---	0.0%	10	---
Unknown		1	0.1%	14	7.1%
Totals		716	100.0%	11,159	6.4%

^a Harvest totals from check station reports.^b Archery = archery only. Both = archery and firearms.^c Only part of county open; western Greene County archery only, eastern Greene both archery and firearms.